CLAIMS

1. A powder container to contain powder used for forming an image and to be attached to an image forming apparatus that includes:

an insertion hole in which the powder container is inserted in a horizontal direction; and

a protrusion that protrudes upward at the insertion hole and is provided in a different shape or position according to a type of the image forming apparatus,

the powder container comprising:

a gap that is provided in a lower portion of the powder container to pass over the protrusion; and

a restrictor to restrict upward movement of the powder container when the gap passes over the protrusion at the insertion hole, wherein

the gap is provided between a pair of the restrictors provided on an outer surface of the powder container.

2. The powder container according to claim 1, wherein

the gap is defined by a pair of container protrusions protruding from the restrictors, and

whether the gap is allowed to pass over the protrusion at the insertion hole is determined based on a distance between the container protrusions.

3. The powder container according to claim 1, wherein

the gap is provided on lower surfaces of the restrictors, and

whether the gap is allowed to pass over the protrusion at the insertion hole is determined based on presence or absence of the gap.

4. The powder container according to claim 2, wherein the container protrusion extends to a position on a downstream side in the powder-container attachment direction relative to centers of the restrictors in a longitudinal direction.

5. The powder container according to claim 1, wherein the restrictor is a sliding guide extending along a longitudinal direction of the powder container.

6. The powder container according to claim 5, wherein the sliding guide includes a sliding groove provided to be parallel to a rotational axis of the powder container.

7. The powder container according to claim 6, wherein the upward movement of the powder container is restricted when a restriction rib provided at the insertion hole is entered into the sliding groove.

8. The powder container according to claim 7, wherein

the sliding groove is defined by an upper guide and a lower guide,

a front side of the sliding groove on the downstream side in the powder-container attachment direction is narrower than a rear side of the sliding groove on an upstream side in the powder-container attachment direction, and

whether the gap is allowed to pass over the protrusion is identified while the restriction rib is inserted in the front side of the sliding groove.

9. The powder container according to claim 6, wherein

the gap is provided on lower surface of the sliding guide, and

whether the gap is allowed to pass over the protrusion at the insertion hole is identified based on presence or absence of the gap.

10. The powder container according to claim 9, wherein

the sliding guide includes a reinforcing portion that is connected to and integrated with the sliding guide, and

the gap is provided on lower surface of the reinforcing portion.

11. The powder container according to claim 1, further comprising:

a container body to store therein the powder; and

a container cover to cover the container body, wherein

the restrictor is provided to the container cover.

12. The powder container according to claim 1, wherein the powder container contains toner as the powder.

13. The powder container according to claim 1, further comprising:

an upward guide provided to an upper portion of the powder container, wherein

the upward movement of the powder container is restricted when the upward guide comes in contact with a ceiling surface of the insertion hole.

14. An image forming apparatus comprising:

the powder container according to claim 1; and

an image forming unit that forms an image on an image bearer by using powder conveyed from the powder container.